What is claimed is:

1.   A method, comprising, the steps of:

     receiving a plurality of sample streams representing respective signal

5   measurements made in differing measurement domains;

     temporally-aligning said sample streams;

     generating waveform data associated with said temporally aligned

sample streams, said waveform data representing sample magnitudes as a

function of time and including Z-axis information adapted to illustrate at least one

10   inter-stream timing relationship.

2.   The method according to claim 1 wherein said waveform data provides a

three-dimensional representation of said time domain measurements.

15 3.   The method according to claim 2 wherein said three-dimensional

representation comprises one of an orthogonal view, a holographic propagation

and a perspective view.

4.   The method according to claim 2 wherein said three-dimensional

20   representation is manipulable.

5.   The method according to claim 2 wherein said three-dimensional

representation is provided by rendering two-dimensional waveforms which are

adapted in perspective in response to a control signal.

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6.   The method according to claim 1 wherein said inter-stream timing

relationship is established by use of at least one of a common trigger event, a

timestamp, and a common clock signal.

30 7.   The method according to claim 1 wherein each of said sample streams is

temporally-aligned to another of said plurality of said sample streams by use of

timestamps.

8.   The method according to claim 1 wherein each of said sample streams is temporally-aligned to another of said plurality of said sample streams by use of a common clock.

5 9.   The method according to claim 1 wherein each of said sample streams is temporally-aligned to another of said plurality of said sample streams by use of a common trigger event.

10.   The method according to claim 9 wherein said common trigger event is one of an analog signal condition, an analog signal transition, an analog signal anomaly, parallel logic combination, and a serial logic combination.

11.   The method according to claim 1 wherein said sample streams represent at least a radio frequency (RF) spectrum, an analog signal, and a digital signal.

12.   The method according to claim 11 wherein X and Y axes for plotting said analog and digital signals are time and magnitude respectively, and X and Y axes for plotting said RF spectrum are frequency and magnitude respectively, and a z-zaxis displacement is indicative of a difference in measurement domain.

13.   The method according to claim 11 wherein:

     said RF signal comprises spectral measurements associated with a communications medium;

     said analog signal comprises a modulated signal passing through said communications medium; and said digital signal represents demodulated data received via said communications medium.

14.   The method according to claim 13 wherein said waveform data is adapted to display an inter-stream timing relationship between an anomaly in said spectral measurement and an anomaly in said demodulated data.

15.   The method according to claim 13 wherein said communications medium comprises at least one of a Bluetooth channel, a WiFi channel, an Ethernet

channel, a satellite channel, a hybrid fiber coax channel, a wireless LAN channel.

16.   The method according to claim 16 wherein each of said sample streams has associated with it a respective sequence of time stamps, said time stamps adapted for use in temporal alignment.

17.   The method according to claim 1 wherein said plurality of sample streams represent an oscilloscope graph, a logic analysis trace, a packet representation and a frequency spectrum waterfall.

18.   The method according to claim 17 wherein said waveform data is produced in a display in which a first axis is time, a second axis is measurement domain and a third axis is content of a measured phenomenon.

19.   The method according to claim 17 wherein said content is represented by at least one of a varying intensity level and a varying color.

20.   The method according to claim 19 wherein said content represents a corruption of data within a communications channel.

21.   The method according to claim 20 wherein in response to completion of data events, said display is adapted to provide visual association between packet errors and RF spectrum measurements.